

PTO/SB/21 (02-04)

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

| | | |
|---|------------------------|------------|
| TRANSMITTAL FORM (to be used for all correspondence after initial filing) | Application Number | 10/665,969 |
| | Filing Date | 2/20/2004 |
| | First Named Inventor | CHOU |
| | Art Unit | |
| | Examiner Name | |
| Total Number of Pages in This Submission | Attorney Docket Number | WM1001 |

| ENCLOSURES (Check all that apply) | | |
|--|---|---|
| <input type="checkbox"/> Fee Transmittal Form | <input type="checkbox"/> Drawing(s) | <input type="checkbox"/> After Allowance communication to Technology Center (TC) |
| <input type="checkbox"/> Fee Attached | <input type="checkbox"/> Licensing-related Papers | <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences |
| <input type="checkbox"/> Amendment/Reply | <input type="checkbox"/> Petition | <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) |
| <input type="checkbox"/> After Final | <input type="checkbox"/> Petition to Convert to a Provisional Application | <input type="checkbox"/> Proprietary Information |
| <input type="checkbox"/> Affidavits/declaration(s) | <input type="checkbox"/> Power of Attorney, Revocation | <input type="checkbox"/> Status Letter |
| <input type="checkbox"/> Extension of Time Request | <input type="checkbox"/> Change of Correspondence Address | <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): |
| <input type="checkbox"/> Express Abandonment Request | <input type="checkbox"/> Terminal Disclaimer | Prior Art Documents |
| <input checked="" type="checkbox"/> Information Disclosure Statement | <input type="checkbox"/> Request for Refund | |
| <input type="checkbox"/> Certified Copy of Priority Document(s) | <input type="checkbox"/> CD, Number of CD(s) _____ | |
| <input type="checkbox"/> Response to Missing Parts/Incomplete Application | Remarks | |
| <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | | |

| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT | |
|--|-----------------|
| Firm or Individual name | CARY TOPE-MCKAY |
| Signature | |
| Date | 02/24/2005 |

| CERTIFICATE OF TRANSMISSION/MAILING | |
|---|-----------------|
| I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below. | |
| Typed or printed name | CARY TOPE MCKAY |
| Signature | |
| Date | 02/24/2005 |

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

| | |
|------------------------|------------|
| Application Number | 10/665,969 |
| Filing Date | 9/18/2003 |
| First Named Inventor | CHOU |
| Art Unit | |
| Examiner Name | |
| Attorney Docket Number | WMI001 |

Sheet 1 of 2

U. S. PATENT DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Document Number | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
|-----------------------|--------------------------|--|--------------------------------|--|---|
| | | Number-Kind Code ² (if known) | | | |
| | 1 | US- 6,046,659 | 04-04-2000 | LOO, et al. | |
| | 2 | US- 6,331,257 | 12-18-2001 | LOO, et al. | |
| | 3 | US- 6,842,097 | 01-11-2005 | HSU, et al. | |
| | 4 | US- 6,803,559 | 10-12-2004 | HSU, et al. | |
| | 5 | US- 6,667,245 | 12-23-2003 | CHOW, et al. | |
| | 6 | US- 5,121,089 | 06-09-1992 | LARSON | |
| | 7 | US- 5,578,976 | 11-26-1996 | YAO | |
| | 8 | US- 5,258,591 | 11-02-1993 | BUCK | |
| | 9 | US- 5,638,946 | 06-17-1997 | ZAVRACKY | |
| | 10 | US- 5,629,565 | 05-13-1997 | SCHLAAK, et al. | |
| | | US- | | | |
| | | US- | | | |
| | | US- | | | |
| | | US- | | | |
| | | US- | | | |
| | | US- | | | |
| | | US- | | | |
| | | US- | | | |
| | | US- | | | |

FOREIGN PATENT DOCUMENTS

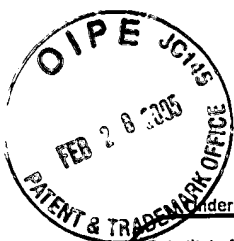
| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear | T ⁴ |
|-----------------------|--------------------------|---|-----------------------------------|--|---|----------------|
| | | Country Code ³ -Number ⁴ -Kind Code ⁵ (if known) | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 2). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.96. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/08B (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known

| | |
|------------------------|------------|
| Application Number | 10/665,969 |
| Filing Date | 9/18/2003 |
| First Named Inventor | CHOU |
| Art Unit | |
| Examiner Name | |
| Attorney Docket Number | WMI001 |

Sheet 2 of 2

NON PATENT LITERATURE DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
|--------------------|-----------------------|---|----------------|
| | 1 | Petersen, K.E. 1978, "Dynamic micromechanics on silison: techniques and devices." | |
| | 2 | Petersen, K.E. "Forming the Contact Surface of Micromechanical Switches", IBM J. Res. Develop., vol.23, No.4, Jul. 1979, pp.376-385 | |
| | 3 | Daniel Hyman, Juan Lam, Brett Warneke, Adele Schmitz, T. Y. Hsu, Julia Brown, James Schaffner, Andy Walston, Robert Y. Loo, Mehran Mehregany, and Jae Lee, "Surface-micromachined RF MEMS switches on GaAs substrates," International Journal of RF and Microwave CAE, Vol. 9, No. 4, July 1999, pp. 348-361. | |
| | 4 | Y. Wang, Z. Li, D. T. McCormick, and N. C. Tien, "A Low-voltage Lateral MEMS Switch with High RF Performance," Journal of MicroElectroMechanical Systems (JMEMS), Vol. 13, No. 6, December 2004, pp. 902-911. | |
| | 5 | Yao, J.J., "RF MEMS from a device perspective", Journal Micromechanics and Microengineering 10: R9-R38, 2000 | |
| | 6 | Zavracky, P.M., Majumdar, S., McGruer, N, 1997, " Micromechanical switches fabricated using nickel surface micromachining", Journal of Microelectromechanical Systems 6(1): 3-9 | |
| | | | |
| | | | |
| | | | |
| | | | |

| | |
|--------------------|-----------------|
| Examiner Signature | Date Considered |
|--------------------|-----------------|

*EXAMINER. Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.